

IN THE CLAIMS

1. (Currently Amended) A method of producing biogas by anaerobic digestion of organic matter, ~~characterised by~~ comprising:

drying organic matter to a dry solids content of at least 50% by weight TS and subsequently pelletising the same,

mixing the pelletised organic matter with a liquid to form a slurry, contacting the slurry with biogas-producing bacteria for digestion under anaerobic conditions in a reactor-(2; 102; 202; 302), and

digesting the slurry while producing biogas.

2. (Original) A method as claimed in claim 1, in which the organic matter is dried to a dry solids content of at least 70% by weight TS.

3. (Currently Amended) A method as claimed in ~~claim 1 or 2~~ claim 1, in which the dried and pelletised matter is ground before being mixed with said liquid to form the slurry.

4. (Currently Amended) A method as claimed in ~~any one of the preceding claims~~ claim 1, in which the organic matter is ground in such a manner that at least 80% by weight of the matter obtains a particle size of 0.5-3 mm.

5. (Currently Amended) A method as claimed in ~~any one of the preceding claims~~ claim 1, in which organic matter of a type other than the first-mentioned organic matter is also digested in the reactor-(202; 302), at least 10% by weight of the total dry solids introduced into the reactor originating from the dried and pelletised organic matter.

6. (Currently Amended) A method as claimed in ~~any one of the preceding claims~~ claim 1, in which the liquid with which the organic matter is mixed is essentially pure water.

7. (Currently Amended) A method as claimed in ~~any one of claims 1-5~~ claim 1, in which the liquid with which the organic matter is mixed at least partly is digested sludge which is removed from the reactor (2; 102; 202; 302)

8. (Currently Amended) A method as claimed in ~~any one of the preceding claims~~ claim 1, in which the pelletised organic matter is mixed in a premixing tank (18; 118; 218; 318) with a liquid to form said slurry with a dry solids content of 15-45% by weight TS, and this slurry is then introduced into the reactor to be digested at a dry solids content of 5-10% by weight TS.

9. (Currently Amended) A method as claimed in ~~any one of the preceding claims~~ claim 1, in which the dried and pelletised organic matter is dried green matter, such as dried agricultural products.

10. (Currently Amended) A method as claimed in ~~any one of the preceding claims~~ claim 1, in which the organic matter is ground before being pelletised.

11. (Currently Amended) A device for producing biogas by anaerobic digestion of organic matter, said device (1; 100; 200; 300) comprising a sealable, essentially gas-tight reactor (2; 102; 202; 302) having an inlet (4; 104; 204; 304) for organic matter and outlets (6, 8; 106, 108; 206, 208; 306, 308) for produced biogas and formed digested sludge, ~~characterised in that~~ wherein the device (1; 100; 200; 300) comprises a premixing tank (18; 118; 218; 318) for mixing organic matter dried to a dry solids content of at least 50% by weight TS and pelletised, with a liquid to a slurry, and a feed pipe (4, 26; 104, 126; 204; 304) for feeding the slurry to the reactor (2; 102; 202; 302)

12. (Currently Amended) A device as claimed in claim 11, in which a mill (14; 114; 214; 314) is arranged for grinding the dried and pelletised organic matter before being introduced into the premixing tank (18; 118; 218; 318)

13. (Currently Amended) A device as claimed in claim 12, in which the mill (14; 114;

214; 314) is adapted to grind the dried and pelletised organic matter so that at least 80% by weight of the organic matter obtains a particle size of 0.5 - 3 mm.

14. (Currently Amended) A device as claimed in ~~any one of claims 11-13~~ claim 11, in which a supply pipe (122; 222) is arranged for feeding digested sludge from the reactor (102; 202) to the premixing tank (118; 218).